

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of providing a ~~an extended~~ group call service in a radio network, comprising the steps of:

(a) making a handover between a mobile station (MS) receiving the group call service and a first BS of a non-service area when the MS moves from a group call area (GCA) providing the group call service to an overlap area wherein the GCA and the non-service area overlap~~generating extended group call service information including information about base stations (BSs) that cover a neighboring group call area (NGCA) and broadcasting by a BS that does not cover a group call area (GCA) but is located in a radio network near to the GCA the extended group call service information;~~

(b) generating and broadcasting, by the first BS, extended group call service information including information on able BSs that belong to GCA neighboring the non-service area~~selecting a BS in the best service condition among BSs set in the extended group call service information as a BS from which an extended group call service is to be received by a mobile station (MS) that is configured to receive the extended group call service information; and~~

(c) selecting a second BS from the able BSs and making a handover between the MS and the second BS after the MS receives the broadcast extended group call service information~~receiving by the MS group call paging information from the BS;~~

(d) ~~analyzing by the MS the group call paging information and determining if the group call service is available from the BS; and~~

~~(e) registering by the MS and connecting to the selected BS if the group call service is available from the BS and receiving the group call from the BS.~~

2. (Currently Amended) The method of claim 1, further comprising:

(d) receiving, by the MS, group call paging information from the second BS;

(e) analyzing the group call paging information and determining if the MS can receive the group call service provided from the second BS; and

(f) registering and connecting the MS to the second BS and receiving a group call if the MS can receive the group call service provided from the second BS ~~wherein in step (a), the BS generates the extended group call service information including the identifications (IDs) of the BSs (NGCA BSs) covering the NGCA, the frequency information of the NGCA BSs, and the group call IDs of the NGCA BSs.~~

3. (Currently Amended) The method of claim [[1]]2, wherein in step ~~[(c)]~~(d), the MS receives the group call paging information on a notification channel (NCH).

4. (Currently Amended) The method of claim [[1]]2, wherein in step ~~[(c)]~~(d), if the MS fails to receive the group call paging information from the second BS, the MS re-selects a third BS of the able BSs ~~from which to receive the extended group call service~~ and receives group call paging information from the re-selected third BS.

5. (Currently Amended) The method of claim [[1]]2, wherein in step ~~[(c)]~~(d), if the MS fails to receive the group call paging information from the second BS, the MS repeats reception of ~~next~~the group call paging information from the second BS a predetermined number of times, and if the MS fails to receive for at least the predetermined number of times the group call paging information from the second BS, the MS re-selects a third BS of the able BSs ~~from which to receive the extended group call service~~ and receives group call paging information from the re-selected third BS.

6. (Currently Amended) The method of claim [[1]]2, wherein in step ~~[[e]]~~(f), the MS changes location registration to the second BS and receives a signal for ~~the~~a group call and a signal for a radio communication service ~~from the BS~~.

7. (Currently Amended) The method of claim [[1]]2, wherein in step ~~[[e]]~~(f), the MS registers only group call service information ~~about the MS from~~ to the second BS and receives ~~the~~a group call from the second BS, ~~while and receives~~ receiving the signal for the radio communication service from ~~[[a]] the first BS to which the MS has already location registered.~~

8. (Currently Amended) The method of claim [[1]]2, further comprising the step of repeating step ~~[[d]]~~(e) after receiving the group call paging information from the second BS by the MS if the MS cannot receive the group call service is not available provided from the second BS ~~in step (d)~~.

9. (Currently Amended) The method of claim [[1]]2, wherein, if the MS cannot receive the group call service is not available provided from the second BS in step ~~[[d]]~~(e), further comprising the steps of:

~~[[f]]~~(g) analyzing by the MS, the paging information received from ~~[[a]] the first BS to which the MS has already registered to;~~

~~[[g]]~~(h) deciding whether the group call paging information ~~from the selected BS~~ has been changed by the MS, if the group call paging information of the second BS is included in the paging information; and

~~[[h]]~~(i) re-selecting, by the MS, a third BS of the able BSs ~~from which to receive the extended group call service~~ if the group call paging information of the second BS has been changed and receiving group call paging information from the re-selected third BS.

10. (New) The method of claim 1, wherein the extended group call service information includes the identifications (IDs) of the BSs (GCA BSs) covering the GCA, the frequency

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information corresponding to the IDs of the BSs, and the group call IDs of the BSs.